

## FOLIAR NEMATODE INFECTION TO FICUS ELASTICA

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Plantings of Ficus elastica Roxb. ex Hornem. 'Decora' are used for site beautification in both indoors and out-of-doors landscapes. A leaf browning or leaf stripe due to infection by foliar nematodes, Aphelenchoides spp., may cause an unsightly appearance of F. elastica 'Decora', which is commonly called the rubber plant. Leaf browning of F. elastica 'Decora' in Florida can be serious because high humidity favors its development.

### Historical

Only since 1963 have the somewhat rectangular leaf discolorations been associated with injury caused by foliar nematodes. Symptoms of the disease in Ficus elastica 'Decora' can be induced by feeding action of any one of three species of Aphelenchoides; A. fragariae (Ritzema Bos, 1891) Christie, 1932, A. ritzema-bosi (Schwartz, 1911) Steiner, 1932, or A. besseyi Christie, 1942. In Florida where large numbers of F. elastica 'Decora' are propagated and grown in commercial nurseries, either A. fragariae or A. besseyi is capable of producing symptoms of this disease.

### Symptoms

The disease symptoms produced by each of the foliar nematode species in F. elastica 'Decora' are quite similar to each other in appearance. First symptoms of the disease appear as slightly chlorotic or light brown somewhat rectangular lesions on the leaf under surface. Usually, within a few days, an area on the upper leaf surface which corresponds to the infected lower leaf surface exhibits early symptoms of the disease. The infected area gradually turns dark brown and may exhibit chlorosis along one or more infected margin. One or more lesions are usually adjacent and somewhat perpendicular to the mid-rib (fig. 1). Infected leaves generally become covered with dark brown lesions and intensely chlorotic areas before falling from the plant. Plants with infected leaves are not readily marketable due to poor appearance.

### Transmission

Foliar nematodes may be transferred directly from infected to non-infected plant material. These nematodes can also be washed from one leaf surface to another by rain, irrigation, and other action of water.

A weed species of grass, Sporobolus poiretii (Roem. & Schult.) Hitchc., is still another means by which Aphelenchoides fragariae can be transferred to Ficus elastica 'Decora'. Elongating grass seed heads become infected with and transfer foliar nematodes upward to the lower leaves of rubber plants.

## Control

Satisfactory control of Aphelenchoides fragariae infecting Ficus elastica 'Decora' has been obtained with Vydate® at the rate of 1000 ppm. Infected and fallen leaves should be collected and destroyed by burning to prevent reinfection.



Fig. 1. Ficus elastica 'Decora' leaf infected with Aphelenchoides fragariae showing brown stripe and associated chlorosis.

## References

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